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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,557	02/14/2005	Yoshiharu Yabuki	019519-454	9111

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EXAMINER

SHAH, MANISH S

ART UNIT	PAPER NUMBER
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2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/524,557

Applicant(s)

YABUKI ET AL.

Examiner

Manish S. Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/14/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-10 & 12-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujiwara et al. (# WO 02/083795 A2).

The applied reference has a common Assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Fujiwara et al. discloses :

- An ink for inkjet recording, comprising at least one compound selected from azo dyes represented by the formula (1): A-N=N-B wherein A and B each independently represents an aromatic group, or a 5- or 6-membered unsaturated heterocyclic group, provided that a substituent on each ring of A and B, which is located at a conjugated

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position with respect to the azo group, satisfies the following conditions (a) to (c): (a) the substituent is not a hydroxyl group, (b) when the substituent is an amino group, the amino group does not have a hydrogen atom at the α -position, and (c) when the substituent is an ether group, the ether group does not have a hydrogen atom at the α -position (page: 16, line: 5-20; page: 142, line: 10-25).

- The at least one of A and B in the formula (1) represents a 5- or 6-membered unsaturated heterocyclic group (page: 16, line: 5-20).

- The azo dye represented by the formula (1) contains an electron-withdrawing group (page: 110, line: 1-20; page: 1-25).

- An ink set for inkjet recording, comprising: a yellow ink containing at least one yellow dye; a magenta ink containing at least one magenta dye; and a cyan ink containing at least one cyan dye (page: 158, line: 1-25; page: 159, line: 1-10), wherein at least one dye of the yellow, magenta and cyan dyes contains an azo dye represented by the following formula (1): $A-N=N-B$ wherein A and B each independently represents an aromatic group, or a 5- or 6-membered unsaturated heterocyclic group, provided that a substituent on each ring of A and B, which is located at a conjugated position with respect to the azo group, satisfies the following conditions (a) to (c): (a) the substituent is not a hydroxyl group, (b) when the substituent is an amino group, the amino group does not have a hydrogen atom at the α -position, and (c) when the substituent is an ether group, the ether group does not have a hydrogen atom at the α -position (page: 16, line: 5-20; page: 142, line: 10-25; page: 143-149).

- An ink set for inkjet recording, comprising: a yellow ink containing at least one yellow dye; a magenta ink containing at least one magenta dye; a cyan ink containing at least one cyan dye; and a black ink containing at least one black dye (page: 158, line: 1-25; page: 159, line: 1-10), wherein at least one dye of the yellow, magenta, cyan and black dyes contains an azo dye represented by the following formula (1): $A-N=N-B$ wherein A and B each independently represents an aromatic group, or a 5- or 6-membered unsaturated heterocyclic group, provided that a substituent on each ring of A and B, which is located at a conjugated position with respect to the azo group, satisfies the following conditions (a) to (c): (a) the substituent is not a hydroxyl group, (b) when the substituent is an amino group, the amino group does not have a hydrogen atom at the .alpha.-position, and (c) when the substituent is an ether group, the ether group does not have a hydrogen atom at the .alpha.-position (page: 16, line: 5-20; page: 142, line: 10-25; page: 143-149).
- An inkjet recording method comprising forming an image using the ink (page: 159, line: 10-25).
- An inkjet recording method comprising forming an image using the ink set (page: 159, line: 10-25; see Examples).
- The inkjet recording method as claimed in claim 13, which comprises forming an image on an image-receiving material comprising a support having thereon an image-receiving layer containing a white inorganic pigment particle (page: 161, line: 10-25; page: 159, line: 10-25; page: 17, line: 10-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

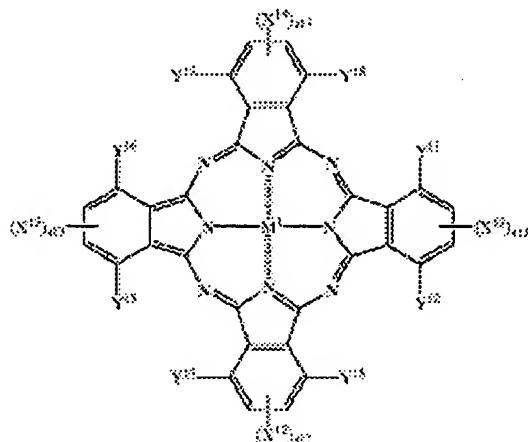
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (# WO 02/083795) in view of Yamanouchi et al. (# US 20020107301).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

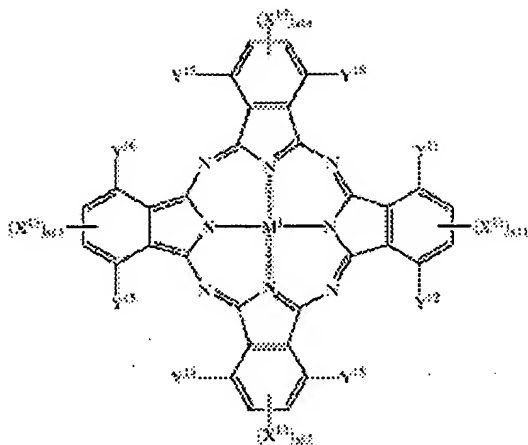
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3. Fujiwara et al. discloses all the limitation of the ink set except that the cyan dye represented by following formula:



wherein X11 to X14 each independently represents an electron-withdrawing group having a σ_p value of 0.40 or more; Y.sub.11 to Y.sub.18 each independently represents a monovalent substituent; M represents a hydrogen atom, a metal element or its oxide, hydroxide or halide; a11 to a14 each independently represents an integer of 1 or 2 ([0207]-[0215]).

Yamanouchi et al. teaches that the to get the water resistance and image fastness printed image, the ink set includes the cyan dye, wherein the cyan dye represented by the following formula:



wherein X11 to X14 each independently represents an electron-withdrawing group having a σ_p value of 0.40 or more; Y.sub.11 to Y.sub.18 each independently represents a monovalent substituent; M represents a hydrogen atom, a metal element or its oxide, hydroxide or halide; a11 to a14 each independently represents an integer of 1 or 2 ([0207]-[0215]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink set of Fujiwara et al. by the aforementioned teaching of Yamanouchi et al. in order to have a water resistance high quality printed image.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Manish S. Shah
Primary Examiner
Art Unit 2853

MSS

12/18/06